

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-23. (canceled)

24. (currently amended) A pigment composition comprising particles (p) based on aluminum metal, said particles (p) having a surface oxidation layer with a mean thickness at most equal to 5 nm, said particles (p) being covered with a protective layer entirely composed of hydrocarbon chains R, said hydrocarbon chains R being bonded to the surface of the particles (p) via bonds as described in formula [particle]-Al-O-Si-R ~~bonds~~, and the composition being devoid of the presence of any fatty acid or fatty acid salt.

25. (previously presented) The composition of claim 24, wherein the particles (p) are anisotropic particles with mean dimensions of less than or equal to 500 microns.

26. (previously presented) The composition of claim 24, wherein the particles (p) are flakes with a mean transverse diameter of less than or equal to 500 microns and with a mean thickness of less than or equal to 3 microns.

27. (previously presented) The composition of claim 26, wherein the aspect ratio of the particles (p) (ratio of the mean thickness to the mean transverse diameter) is between 1/5 and 1/1000.

28. (previously presented) The composition of claim 24, wherein the specific surface of the particles (p) is between 0.5 and 500 m²/g.

29. (previously presented) The composition of claim 24, wherein the hydrocarbon chains R are selected from the group consisting of :

- alkyl chains comprising from 1 to 30 carbon atoms;
- alkyl chains which are completely or partially fluorinated and optionally hydroxylated comprising from 1 to 30 carbon atoms;
- alkenyl or alkynyl chains comprising from 2 to 30 carbon atoms;
- cyclic, aromatic, optionally halogenated, hydrocarbon chains comprising between 6 and 30 carbon atoms;
- hydrocarbon chains comprising from 1 to 30 carbon atoms which are substituted by at least one amine functional group;

- hydrocarbon chains comprising from 3 to 30 carbon atoms and comprising polymerizable groups.

30. (previously presented) The composition of claim 24, wherein the mean amount of hydrocarbon chains R bonded to the surface of the particles (p) is of at least 10 micromol per m².

31. (previously presented) The composition of claim 24, which is in the form of a powder comprising the particles (p) in the dry state, or in the form of a dispersion comprising the particles (p) in an aqueous medium, or in the form of a dispersion comprising the particles (p) in a solvent medium.

32. (canceled)

33. (previously presented) A process for the preparation of the composition of claim 24, which comprises a stage (E) consisting in deforming, under mechanical stress, particles (p₀) based on aluminum metal in the presence of the following compounds:

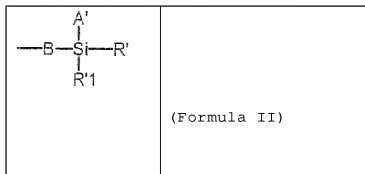
- (i) silanes having the following formula (I):



Formula (I)

wherein:

- R represents a hydrocarbon chain;
- A denotes a hydrolyzable group; and
- R1 and R2, are identical or different, and each represent:
 - a hydrolyzable group which is or is not identical to the group A;
 - a hydrocarbon chain which is or is not identical to the chain R;
 - a group of formula (II):



wherein:

- B is a hydrocarbon chain optionally interrupted by oxygen atoms;
- A' has one of the meanings given above for A;

- R' has one of the meanings given above for R;
- R'1 denotes a hydrolyzable group or a hydrocarbon chain;

(ii) water, at least in the form of traces.

34. (previously presented) The process of claim 33,
wherein stage (E) is ~~carried~~^{carried} out in the further presence of

/hl/

(iii) an organic solvent.

35. (previously presented) The process of claim 33,
wherein the particles (p_0) employed in stage (E) exhibit an
initial particle size of between 0.1 and 100 microns.

36. (previously presented) The process of claim 33,
wherein the particles (p_0) which are employed in stage (E) are
particles which have been grafted beforehand with organic chains.

37. (previously presented) The process of claim 33,
wherein, in the silanes of formula (I), the hydrolyzable groups
are chosen from the group consisting of chloro, alkyloxyl and
aryloxyl groups.

38. (previously presented) The process of claim 33,

wherein the amount of silanes (I) employed in stage (E) is of at least 40 g per kg of aluminum.

39. (previously presented) The process of claim 33, wherein the solvent (iii) employed in stage (E) is chosen from the group consisting of mixtures of aliphatic hydrocarbons, mixtures of aromatic hydrocarbons, and mixtures thereof.

40. (previously presented) The process of claim 33, wherein the amount of organic solvent (iii) employed in stage (E) is of between 1 and 10 kg per kg of aluminum.

41. (previously presented) The process of claim 33, wherein stage (E) is carried out at a temperature of between 10 and 80°C.

42. (previously presented) The process of claim 33, which further comprises, following stage (E), a maturing stage which consists in leaving the medium standing for at least 24 hours at a temperature of greater than or equal to 20°C.

43. (previously presented) The process of claim 33, which further comprises, following stage (E), a stage of removal of the solvent, whereby a composition in the form of a powder is obtained, which composition can subsequently be optionally

dispersed in a solvent phase, whereby a composition in the form of a dispersion is obtained.

44. (previously presented) A process for the preparation of the composition of claim 24, which comprises the stage (E') consisting in deforming, under mechanical stress, particles (p'_0) based on aluminum metal under an inert gas atmosphere in the presence of the following compounds:

(i') silanes corresponding to the general formula (I);
and

(ii') water, at least in the form of traces.

45. (canceled)

46. (previously presented) A metallic paint composition comprising the composition of claim 24.